

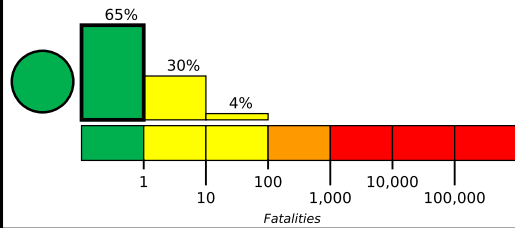
## M 6.3, 81 km NW of Vallenar, Chile

Origin Time: 2020-09-01 04:30:02 UTC (Tue 00:30:02 local)

Location: 28.0262° S 71.3051° W Depth: 18.7 km

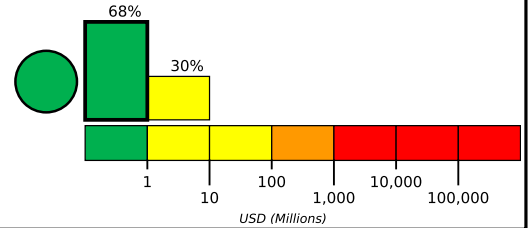
Created: 1 day, 17 hours after earthquake

### Estimated Fatalities



Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.

### Estimated Economic Losses

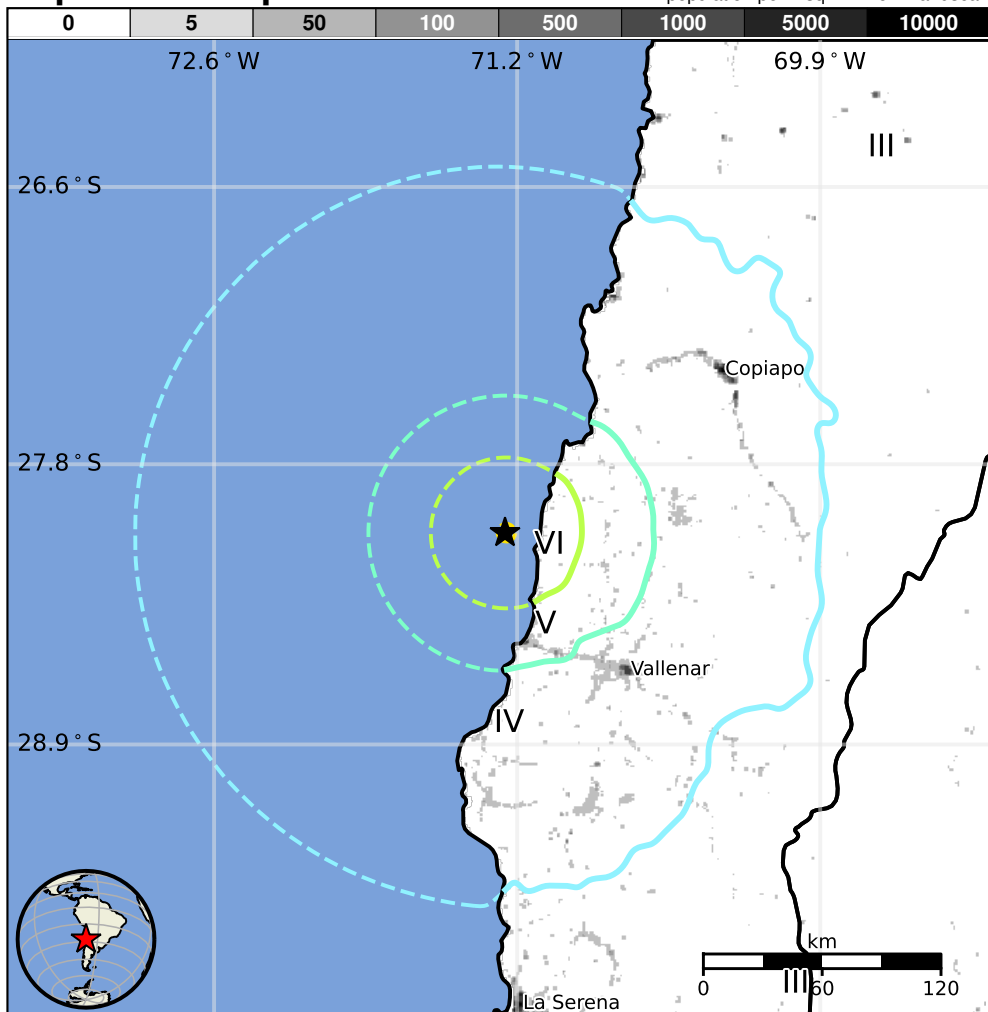


### Estimated Population Exposed to Earthquake Shaking

| ESTIMATED POPULATION EXPOSURE (k=x1000) |                       | —*       | 412k*  | 250k  | 16k      | 1k       | 0           | 0          | 0        | 0        |
|---|-----------------------|----------|--------|-------|----------|----------|-------------|------------|----------|----------|
| ESTIMATED MODIFIED MERCALLI INTENSITY   |                       | I        | II-III | IV    | V        | VI       | VII         | VIII       | IX       | X+       |
| PERCEIVED SHAKING                       |                       | Not felt | Weak   | Light | Moderate | Strong   | Very Strong | Severe     | Violent  | Extreme  |
| POTENTIAL DAMAGE                        | Resistant Structures  | None     | None   | None  | V. Light | Light    | Moderate    | Mod./Heavy | Heavy    | V. Heavy |
|   | Vulnerable Structures | None     | None   | None  | Light    | Moderate | Mod./Heavy  | Heavy      | V. Heavy | V. Heavy |

\*Estimated exposure only includes population within the map area.

### Population Exposure



### Structures

Overall, the population in this region resides in structures that are resistant to earthquake shaking, though vulnerable structures exist. The predominant vulnerable building types are adobe block and rubble/field stone masonry construction.

### Historical Earthquakes

| Date (UTC) | Dist. (km) | Mag. | Max MMI(#) | Shaking Deaths |
|------------|------------|------|------------|----------------|
| 1983-10-04 | 183        | 7.6  | VII(30k)   | 5              |
| 1975-03-13 | 209        | 6.9  | VIII(266k) | 2              |
| 1997-10-15 | 318        | 7.1  | VIII(3k)   | 7              |

Recent earthquakes in this area have caused secondary hazards such as landslides that might have contributed to losses.

### Selected City Exposure

from GeoNames.org

| MMI | City             | Population |
|-----|------------------|------------|
| IV  | Vallenar         | 45k        |
| IV  | Copiapo          | 129k       |
| IV  | Vallenar         | <1k        |
| III | La Serena        | 155k       |
| III | Coquimbo         | 161k       |
| III | Diego de Almagro | 18k        |

PAGER content is automatically generated, and only considers losses due to structural damage.

Limitations of input data, shaking estimates, and loss models may add uncertainty.

<https://earthquake.usgs.gov/earthquakes/eventpage/us7000bfjx#pager>

bold cities appear on map.

(k = x1000)

Event ID: us7000bfjx